WHAT IS CLAIMED IS:

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- 1. A method for treating endometriosis, comprising administering to a patient in need thereof a therapeutically effective amount of a TNF antagonist, wherein said TNF antagonist is a TNF signaling antagonist.
- 2. The method of claim 1, wherein said TNF signaling antagonists is a receptor molecule, derivative or a fragment thereof which binds to TNF.
- 3. The method of claim 1, wherein said TNF signaling antagonist is an anti-TNF antibody or a fragment thereof.
- 4. A method for improving implantation and fertility rate by reducing endometriotic lesions, comprising administering to a patient in need thereof a therapeutically effective amount of a TNF antagonist, wherein said TNF antagonist is a TNF signaling antagonist.
- 5. The method of claim 4, wherein said TNF signaling antagonists is a receptor molecule, derivative or a fragment thereof which binds to TNF.
- 6. The method of claim 4, wherein said TNF signaling antagonists is an anti-TNF antibody or a fragment thereof.
- 7. A pharmaceutical composition, comprising a TNF antagonist and a pharmaceutically acceptable carrier.

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- 8. The pharmaceutical composition of claim 7, wherein said TNF antagonist is a polypeptide able to bind a specific epitope of TNF in such a way that TNF is no longer able to bind a membrane-bound TNF receptor.
- 9. The pharmaceutical composition of claim 8, wherein said TNF antagonist is a receptor molecule, derivative or a fragment thereof which binds to TNF.
- 10. The pharmaceutical composition of claim 9, wherein said receptor molecule is selected from the group consisting of TNF-RI and TNF-RII.
- 11. The pharmaceutical composition of claim 9, wherein said receptor molecule is the extracellular domain of TNF-RI.
- 12. The pharmaceutical composition of claim 9, wherein said receptor molecule is human soluble recombinant TNF-RI.
- 13. The pharmaceutical composition of claim 9, wherein said receptor molecule is a TNF receptor multimeric molecule or a functional portion thereof.
- 14. The pharmaceutical composition of claim 13, wherein said TNF receptor multimeric molecule comprises all or a functional portion of two or more extracellular domains of TNF receptors linked via one or more polypeptide linker.

15. The pharmaceutical composition of claim 9, wherein said receptor molecule is an immunoreceptor fusion molecule or a functional portion thereof.

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- 16. The pharmaceutical composition of claim 15, wherein said immunoreceptor fusion molecule comprises all or a functional portion of TNF receptor and an immunoglobulin chain.
- 17. The pharmaceutical composition of claim 7, wherein said TNF antagonist is an anti-TNF antibody or a fragment thereof.
- 18. The pharmaceutical composition of claim 17, wherein said antibody or fragment thereof is selected from the group consisting of a chimeric monoclonal antibody, a humanized monoclonal antibody, and fragments thereof.